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Attorney Docket No. 003797.87364


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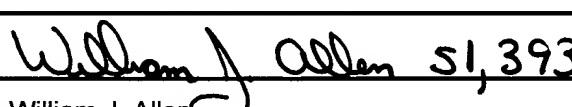
By: Rafael Perez

Dunietz, et. al., U.S. Patent Application No. 09/552,262 for "PRE-COMPUTING AND ENCODING TECHNIQUES FOR AN ELECTRONIC DOCUMENT TO IMPROVE RUN-TIME PROCESSING"

- Transmittal Form
- Fee Transmittal
- Appeal Brief (in triplicate)
- Return Receipt Postcard

	Application Number	09/552,262
	Filing Date	April 19, 2000
	First Named Inventor	Dunietz
	Art Unit	2176
	Examiner Name	Smith
Total Number of Pages in This Submission		Attorney Docket Number 003797.87364

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief [in triplicate], Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Receipt Postcard Express Mail Certificate
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Date	April 15, 2005	Reg. No.	51,393

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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). <div style="font-size: 2em; font-weight: bold; text-align: center;">FEE TRANSMITTAL</div> <div style="font-size: 1.5em; font-weight: bold; text-align: center;">for FY 2005</div>		Complete If Known	
<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block; text-align: center;"> APR 15 2005 U.S. PATENT & TRADEMARK OFFICE </div>		Application Number: 09/552,262 Filing Date: April 19, 2000 First Named Inventor: Dunietz Examiner Name: Smith Art Unit: 2176 Attorney Docket No.: 003797.87364	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		TOTAL AMOUNT OF PAYMENT (\$): 500	

METHOD OF PAYMENT (check all that apply)

- ☐ Check
 ☐ Credit Card
 ☐ Money Order
 ☐ None
 ☐ Other (please identify) : _____
- ☒ Deposit Account
 Deposit Account Number: 19-0733
 Deposit Account Name: Banner & Witcoff, LTD.
- For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)
- ☒ Charge fee(s) indicated below
 ☐ Charge fee(s) indicated below, except for the filing fee
- ☒ Charge any additional fee(s) or underpayments of fee(s)
 ☒ Credit any overpayments
- Under 37 CFR 1.16 and 1.17
- WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES**Fee Description**

Each claim over 20 (including Reissues)

Small Entity

Fee (\$)

Fee (\$)

Each independent claim over 30 (including Reissues)

50

25

Multiple dependent claims

200

100

Total Claims

360

180

Extra Claims

Multiple Dependent Claims

-20 or HP=

Fee (\$)

Fee Paid (\$)

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims

Fee (\$)

Fee Paid (\$)

-3 or HP=

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____	_____	_____

_____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Appeal Brief

Fees Paid (\$)

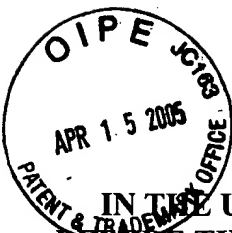
\$500

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	51,393	Telephone	312-463-5000	
Name (Print/Type)	William J. Allen	Date	April 15, 2005			

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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JW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Attorney Docket No. 003797.87364

In re U.S. Patent Application of Jerry)
Dunietz, *et al.*)
)
Application No. 09/552,262) Group Art Unit: 2176
)
Filed: April 19, 2000) Examiner: Peter J. Smith
)
For: PRE-COMPUTING AND ENCODING) Confirmation No. 4106
TECHNIQUES FOR AN ELECTRONIC)
DOCUMENT TO IMPROVE RUN-TIME)
PROCESSING)

BRIEF ON APPEAL

Mail Stop: Appeal Brief-Patents
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Alexandria, VA 22313-1450

This is an Appeal Brief in accordance with 37 C.F.R. § 1.192, filed in triplicate in support of Applicant's February 18, 2005 Notice of Appeal. Appeal is taken from the Final Office Action mailed October 19, 2004. Please charge any necessary fees in connection with this Appeal Brief to our Deposit Account No. 19-0733.

1. Real Parties in Interest

The owner of this application and real party in interest is Microsoft Corporation.

2. Related Appeals and Interferences

There are no related appeals and interferences.

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3. Status of the Claims

Claims 1-35 are rejected. Claims 1-35 are pending and are being appealed herein. All of the pending claims, claims 1-35 are shown in the attached appendix.

Claims 1-7, 9, 12-13, 16-23, and 32-35 are rejected under 35 USC § 103(a) as being unpatentable over U.S. Pat. No. 6,330,574 to Murashita ("Murashita"), filed March 30, 1998 in view of "Open eBook Publication Structure 1.0" ("Open eBook"), published September 16, 1999.

Claims 24-31 are rejected under 35 USC § 103(a) as being unpatentable over Open eBook in view of Murashita.

Claims 10 and 11 are rejected under 35 USC § 103(a) as being unpatentable over Open eBook in view of U.S. Pat. No. 4,864,502 to Kucera, *et al.* ("Kucera"), filed October 7, 1987.

Claims 14 and 15 are rejected under 35 USC § 103(a) as being unpatentable over Open eBook in view of U.S. Pat. No. 6,442,576 to Edelman, *et al.* ("Edelman"), filed August 6, 1997.

Claim 8 is rejected under 35 USC § 103(a) as being unpatentable over Murashita in view of Open eBook and further in view of Edelman.

4. Status of Amendments

There are no amendments subsequent to the Final Office Action of October 30, 2003, and all prior amendments have been entered.

5. Summary of the Invention

In making reference herein to various portions of the specification and drawings in order to explain the claimed invention (as required by 37 C.F.R. § 1.192(c)(5)), Appellant does not intend to limit the claims; all references to the specification and drawings are illustrative unless otherwise explicitly stated.

Aspects of the invention are directed to a process that converts an e-book from a general format, such as Open eBook, to a simplified file format hierarchy. (Pg. 5, Ln. 2-4). Typically, the general format includes tags that are commands written between "<" and ">" symbols, where the commands affect how the content is displayed and the tags can be heavily intermixed with the content. (Pg. 2, Ln. 25 – Pg. 3, Ln. 4). During the process, the conversion pre-computes and encodes the e-book to accelerate run-time search operations and to minimize computation requirements for run-time parsing and other forms of processing. (Pg. 5, Ln. 4-7). In an embodiment, the content and tags are separated and the tags are replaced with pre-defined integer representations. (Pg. 5, Ln. 17-19). Flags may be inserted into the tags to identify start and end tags, word breaks and area of content that should be skipped during a run-time search. (Pg. 5, Ln. 19 – Pg. 6, Ln. 2). For example, content associated with a tag containing the flag "NOSEARCH" indicates that content is hidden and need not be searched at run time. (Pg. 22, Ln. 3-6).

The converted e-book may be a single file within a nest hierarchy of files, where the nested files can be multiple directories and files. (Pg. 13, Ln. 1-15). Thus, the converted e-book has a root directory and linked metadata files as well as a linked content subdirectory within the root directory. (Pg. 13, Ln. 19-25). The root directory may include a linked manifest file that provides a list of all the files in the e-book so that the list does not need to be derived from the metadata. (Pg. 15, Ln. 21-22).

During encoding, a code character is inserted to separate markup language from the actual content, where the code character may be UNICODE character 0x0000. (Pg. 16, Ln. 1-3). The code character is inserted before and after each start and end tag. (Pg. 16, Ln. 3-4). Flags

such as “NOSEARCH” and “WORDBREAK” may be inserted in between the boundary code characters to help identify the content associated with the tag. (Pg. 19, Ln. 19-22).

For example, the tag, which could be the tag “<td nowrap>” becomes the structure:

- (1) 0x000
- (2) Flags = STARTTAG | WORDBREAK = 0x000C
- (3) Tag code = TAGID_TD = 95 = 0x5f
- (4) Attribute code=DISPID_IHTMLTABLECELL_NOWRAP = 0x8001138D
- (5) Attribute value = Boolean TRUE
- (6) 0x000

(Pg. 23, Ln. 5-21). The sequence may then be encoded into Unicode characters, converted into UTF-8 format and compressed so as to minimize computational requirements during run time.

(Pg. 24, Ln. 19 – Pg. 26, Ln. 5).

6. Issues

The issues under appeal are:

a) whether Murashita inherently or actually discloses, suggests or teaches the claimed features of 1) “separating the tag from the content with a separation variable,” 2) “inserting at least one code character into the electronic document to separate markup language from content,” and 3) “a code separating the tag from the content portion;”

b) whether Open eBooks inherently or actually discloses or suggests or teaches the claimed features of 1) “inserting at least one flag within the tag to form an encode tag structure,” 2) “determining whether the portion is to be displayed for viewing by a reading device,” 3) “if the portion is not to be displayed for viewing, inserting a no search flag in association with the portion,” 4) “a root directory” and “a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information ...,” and 5) “if the left and right terms are not part of a single word, inserting a word break flag between the left and right term;” and

c) whether Edelman discloses or suggests the claimed features of “replacing part of the URL with the reference string and a flag for the file.”

7. Grouping of Claims

In accordance with 37 C.F.R. § 1.192(c)(7), Appellant respectfully asserts that the claims do not stand or fall together. The following groups of separately patentable claims should be recognized:

GROUP I - - Claims 1-9;

GROUP II - - Claims 10-11;

GROUP III - - Claims 12-13;

GROUP IV - - Claims 14-15;

GROUP V - - Claims 16-23;

GROUP VI - - Claims 24-35;

8. Argument

A. Claims 1-9, 12-13, and 16-35 are Patentable under 35 U.S.C. 103(a) over Murashita in combination with Open eBooks.

Claims 1-7, 9, 12-13, 16-23 and 32-35 were rejected under 35 U.S.C. § 103(a) over Murashita in view of Open eBooks. Claims 24-31 were rejected under 35 U.S.C. § 103(a) over Open eBooks in view of Murashita. Thus, claims 1-7, 9, 12-13, and 16-35 stand rejected over the combination of Murashita and Open eBooks. Claim 8 depends from claim 1. As will be shown below, the combination fails to disclose or suggest at least one claimed feature of all the rejected claims, thus Murashita in combination with Open eBooks fails to support a *prima facie* case of obviousness for claims 1-9, 12-13, and 16-35.

1. Independent claim 1 is patentable because Murashita does not inherently disclose or suggest the claimed feature “separating the tag from the content with a separation variable” recited in claim 1.

Murashita discloses a method of compressing the amount of data in a document. (Murashita, Col. 3, Ln. 7-11). Tags in a tag document are assigned a predetermined code in a tag code table during coding and during decoding the tag is placed in the document according to the tag code table. (Murashita, Col. 3, Ln. 12-33). Thus, Murashita uses a predetermined code to replace a tag during coding and inserts the tag back into the document during decoding based on the tag code table. Murashita, however, fails to disclose or suggest “separating the tag from the content with a separation variable.”

Independent claim 1 recites “separating the tag from the content with a separation variable.” The Examiner argued that Murashita “teaches separating a tag from content with a separation variable and replacing a tag with an alias,” citing Murashita, Col. 3, Ln. 12-33, and equating the claimed separation variable to the “<” and “>” symbols defining the bounds of a markup language tag. However, as previously explained by Appellants in a prior response, “the separation variable is inserted before and after each start and end tag and does not replace the start and end tags.” (Request for Reconsideration, pg. 8). The specification on page 17 supports this understanding of a separation variable:

At step 410, a code character is inserted to separate markup language from the actual content of the e-book file. For example, the code may be a Unicode character 0x0000. The Unicode character is inserted before and after each start and end tag. Subsequent encoding of the markup (discusses herein) should be constrained so that the Unicode character 0x0000 never occurs within the representation of a start or end-tag or elsewhere within the content, but rather occurs only as a first and last character of each start and end tag.

Thus, the Examiner is miss-reading the “separation variable.”

The Examiner also argued that Murashita inherently included the claimed “separation variable” because otherwise it would not be possible to discern the boundary between the

markup alias and other content. (Final Office Action, pg. 12). However, the alias that Murashita uses to replace the tags could readily be discernable by itself. Indeed, contrary to the Examiner's position, an example provided by Murashita (Col. 15, Ln. 53 – Col. 16, Ln. 17) does not use a "separation variable." Thus, the "inherency" argument is unsupported and incorrect. As the Murashita does not disclose or suggest a "separation variable" as claimed and such a separation variable is not inherently required, Murashita fails to disclose or suggest such a feature. The inclusion of Open eBooks fails to correct this deficiency. Accordingly, independent claim 1 is patentable over the combination of Murashita and Open eBooks for at least this reason.

2. Independent claim 1 is patentable because Open eBooks fails to disclose or suggest the claimed feature "inserting at least one flag within the tag to form an encode tag structure" of independent claim 1.

The Examiner and the Appellants agree that Murashita fails to disclose the element "inserting at least one flag within the tag to form an encode tag structure" as claimed in independent claim 1. The Examiner argued, however, that Open eBooks does disclose such a limitation.

Open eBooks discloses that x-metadata allows content providers to express arbitrary metadata beyond the data described by the Dublin Core language. For example, lines 7-12 of Section 2.2 of Open eBook state:

The x-metadata element must contain one or more instances of a meta element, analogous to the HTML 4.0 meta element, but applicable to the publication as a whole. The x-metadata element allows content providers to express arbitrary metadata beyond the data described by the Dublin Core language. Individual OEB documents may include the meta element directly (as in HTML 4.0) for document-specific metadata. This specification uses the OEB package file alone as the basis for expressing publication-level Dublin Core metadata.

However, allowing content providers to express arbitrary metadata does not disclose, suggest or teach “inserting at least one flag within the tag to form an encode tag structure.” The Examiner, while not pointing to any actual disclosure of such a element, argued:

The metadata is information about the content of the publication which aids a computer in processing the document. The metadata can enhance a search of the document by providing relevant search information about the content of the document. Thus, the Examiner believes this leads to the teaching of “inserting at least one flag within the tag to form an encode tag structure[”] by the combination of teachings of Murashita and Open eBook.

(Final Office Action, pg 12-13). The Examiner’s belief, however, is not supported by Open eBooks. No structure has been pointed to, nor does any portion of Open eBooks actually refer to “inserting at least one flag within the tag to form an encode tag structure.” Thus, regardless of whether metadata can enhance a search, the Examiner’s belief that the provision of arbitrary metadata somehow teaches the claimed feature “inserting at least one flag within the tag to form an encode tag structure” is not supported. To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). The Examiner’s belief that metadata can enhance a search leads to the teaching of “inserting at least one flag within the tag to form an encode tag structure,” without more, does not establish a *prima facie* case of obviousness. The Appellants further submit that the possibility that Open eBook could be modified in light of the pending application does not support an obviousness rejection but merely suggests the rejection is based on impermissible hindsight reconstruction.

Accordingly, independent claim 1 is patentable over the combination of Murashita and Open eBooks for at least this reason.

3. Claims 2-9 are also patentable over the combination of Murashita and Open eBooks.

Dependent claims 2-7 depend from claim 1 and thus are at least patentable over the combination of Murashita and Open eBooks for the above reasons and for the additional claimed features recited therein.

Claim 9 is based on claim 1 and is patentable over the combination of Murashita and Open eBooks for the reasons discussed above with respect to claim 1.

Claim 8, rejected under Murashita in view of Open eBooks in further view of Edelman, is patentable for at least the same reason as the independent claim 1 from which claim 8 depends.

4. Claims 12 and 13 are patentable because Open eBooks fails to disclose the claimed features of a) “determining whether the portion is to be displayed for viewing by a reading device” and b) “if the portion is not to be displayed for viewing, inserting a no search flag in association with the portion” as recited in independent claim 12.

Independent claim 12 recites the claimed elements:

(b) determining whether the portion is to be displayed for viewing by a reading device; and

(c) if the portion is not to be displayed for viewing, inserting a no search flag in association with the portion,

whereby a no search field may be readily identified and skipped during a run-time linear search.

The Examiner and Appellants agree that Murashita does not disclose, suggest or teach either of these claimed features. The Office Action stated, however, that Open eBooks teaches the claimed feature “determining whether the portion is to be displayed for viewing by a reading device,” explaining:

Open eBooks teaches that the rendering device may determine how the document is displayed and presented to the user and thus teaches determining whether a portion is to be displayed for viewing a reading device.

(Final Office Action, pg. 13). The Office Action cited to Section 3.3 of Open eBooks for support, which is provided below:

3.3 Rendering on Limited Reading Systems

A number of elements and attributes below permit semantics that are not required of all OEB reading systems. For example, some devices may be monochrome, or provide mainly audio or tactile interfaces. In such cases this specification generally requires reading systems to accept all syntax (such as attribute values) permitted for the HTML construct, but does not require that they be honored. For example, a reading system must parse and recognize the *border* attribute on *table* elements, but may choose to treat all values other than 0 the same as 1.

Note that this specification does not mandate specific rendering behavior for the HTML constructs. Some reading systems may choose to express the intent of elements in presentation by closely following web-browser usages – a blank line before a paragraph, but no first-line text-indent, for example. Other reading systems may gear their presentation towards sustained novel-like readability: for example, no extra whitespace between paragraphs, but text –indent on the first line of each. Still other systems, such as speech generators, may present particular elements or entire documents in completely different ways.

The Appellants respectively submit that Section 3.3 fails to support the Examiner's position. Open eBooks only describes a method of formatting the display. Just because Open eBooks teaches how to display portions of the document does not mean it teaches to not display portions of a document. Such a leap of logic is simply unsupported. No portion of Open eBooks has been pointed to that actually suggests or teaches "determining whether the portion is to be displayed for viewing by a reading device." Rather, Open eBooks at most teaches determining how to display. As the combination of Murashita and Open eBooks does not teach this claimed feature of independent claim 12, the combination cannot support an obviousness type rejection of independent claim 12.

In addition, independent claim 12 recites the claimed feature "if the portion is not to be displayed for viewing, inserting a no search flag in association with the portion." Even if Open eBooks could somehow be construed to disclose, suggest or teach the claimed feature

“determining whether the portion is to be displayed for viewing by a reading device,” there is still nothing to suggest “inserting a no search flag in association with the portion” as claimed in claim 12.

The Office Action pointed to no structure or specific disclosure in Open eBooks as disclosing this claimed feature, instead stating:

Open eBooks teaches an x-metadata element which includes one or more instances of a meta element, similar to the HTML 4.0 meta element. The metadata is information about the content of the publication which aids a computer in processing the document. The metadata can enhance a search of the document by providing relevant search information about the contents of the document.

(Final Office Action, Pg. 13). Appellants respectively submit that nothing in the above argument addresses the issue of whether Open eBooks actually discloses, suggests or teaches the claimed feature “inserting a no search flag in association with the portion” as claimed in claim 12. As noted above, every limitation must be disclosed, suggested or taught by the combination of references. Here, there is no actual disclosure, suggestion or teaching of “inserting a no search flag in association with the portion.”

Accordingly, as at least two claimed features of claim 12 are not disclosed, suggested or taught by Open eBooks, the combination of Murashita and Open eBooks cannot be used to support an obviousness rejection of claim 12.

Claim 13 depends from claim 12 and is allowable for at least the reasons discussed above and for the additional claimed features recited therein.

5. Claims 16-18 are patentable because Murashita does not inherently disclose the claimed feature “inserting as least one code character into the electronic document to separate markup language from content” as recited in independent claim 16.

Claim 16 recites the claimed feature of “inserting at least one code character into the electronic document to separate markup language from content.” The Examiner and Appellants agree that Murashita does not explicitly teach “inserting as least one code character into the electronic document to separate markup language from content.” The Examiner argued, however, that Murashita inherently includes “inserting at least one code character into the electronic document to separate markup language from content,” stating:

Murashita teaches inserting a markup alias into a document to replace markup tags. In order for Murashita to even function, Murashita must be able to identify and discriminate between markup alias data and document content. If Murashita is unable to discern between the two types of data, then it cannot function. Therefore a separation boundary must exist and the motivation for the separation boundary to exist is to identify the markup alias successfully.

(Final Office Action, pg. 13-14). The Appellants, however, respectfully submit that the Examiner’s position is incorrect. While Murashita may need to discern between two types of data, there is nothing in Murashita to suggest “inserting at least one code character into the electronic document to separate markup language from content.” At most, Murashita discloses a tag discriminating unit which determines whether data in the document instance of an SGML document is a tag or not. (Murashita, Col. 15, Ln. 28-31). As noted above, an example provided by Murashita’s does not teach “inserting at least one code character into the electronic document to separate markup language from content.” Therefore, contrary to the Examiner’s position, Murashita does not need to insert “at least one code character into the electronic document to separate markup language from content” in order to function. Nor has the Examiner pointed to any part of either Murashita or Open eBooks that provides motivation to make any modification to Murashita to disclose, teach or suggest the claimed element.

Accordingly, Murashita fails to disclose, suggest or teach the claimed feature of “inserting at least one code character into the electronic document to separate markup language from content.” The inclusion of Open eBooks does nothing to correct this deficiency. Therefore, the combination of Murashita and Open eBooks does not support an obviousness-type rejection of independent claim 16.

Claim 17 depends from claim 16 and is patentable at least for the reasons discussed above and for the additional claimed elements recited therein.

Claim 18 is based on claim 16 and is patentable for the reasons discussed with regard to claim 16.

6. Claims 19-23 are patentable because Murashita does not inherently disclose the claimed feature “a code separating the tag from the content portion” recited in independent claim 19.

Claim 19 recites the claimed feature “a code separating the tag from the content portion.” While not pointing to any particular disclosure in Murashita, the Office Action stated that the claimed feature was “inherently” taught by Murashita because otherwise Murashita could not function. As noted above with respect to independent claim 16, Murashita at most discloses a tag discriminating unit which determines whether data in the document instance of an SGML document is a tag or not. (Murashita, Col. 15, Ln. 28-31). And as noted above, contrary to the Examiner’s position, there is no need for Murashita to include “a code separating the tag from the content portion” because the example provided by Murashita did not. Therefore, the Examiner’s argument that “a code separating the tag from the content portion” is inherent in Murashita is unsupported and incorrect. Nor is there anything in either Murashita or Open eBooks that suggests modifying Murashita.

Accordingly, as nothing in Murashita actually or inherently discloses, suggests or teaches “a code separating the tag from the content portion,” and Open eBooks does not correct this deficiency, the combination of Murashita and Open eBooks cannot support an obviousness-type rejection of independent claim 19.

Claims 20-23 depend from independent claim 19 and are nonobvious for at least the reasons discussed with regard to claim 19 and for the additional features recited therein.

7. Claims 24-31 are patentable because Open eBook fails to disclose the claimed features of a) “a root directory” and b) “a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information relating to the electronic book” as recited in independent claim 24.

Claim 24 recites the claimed features of “a root directory” and “a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information relating to the electronic book, wherein the content file is pre-computed and encoded to minimize computational run-time requirements.” (Emphasis added). The Office Action stated that Open eBook teaches a root directory and a content subdirectory, citing Sections 2.2 and 2.3 of Open eBook. These sections, however, fail to disclose such structure. Rather than provide a root directory and content subdirectory as claimed, Open eBooks discusses a metadata element in Section 2.2 and explains that the metadata element is what is used to provide information about the publication as a whole:

“The required *metadata* element is used to provide information about the publication as a whole. It contains a Dublin Core metadata record within a *dc-metadata* element, and supplemental metadata in an *x-metadata* element.

(Open eBook, Section 2.2, Ln. 1-2). Section 2.3 of Open eBook refers to a manifest that contains a list of all the files that are part of the publication. Neither section, however, discloses “a root directory” and “a content subdirectory linked to the root directory...” as claimed.

Accordingly, Open eBooks fails to disclose the claimed “root directory” and “a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information relating to the electronic book” as recited in independent claim 24.

Therefore, Appellants submit that independent claim 24 is allowable.

Claims 25-31 depend from claim 24 and are also allowable as being dependent on an allowable base claim and further in view of additional claimed features recited therein.

8. Claims 32-35 are patentable because Open eBook fails to disclose the claimed features of a) “a root directory” and b) “a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information relating to the converted document” as recited in independent claim 35.

Claim 32 also stands rejected under the combination of Murashita and Open eBook. The Examiner admits that that Murashita does not teach the above features but argued that “Open eBook does teach a document comprising a root directory and a content subdirectory . . . ,” referring to Sections 2.2 and 2.3 of Open eBook. (Final Office Action, Pg. 7).

Appellants’ submit that, as discussed above with regard to claim 24, Sections 2.2 and 2.3 of Open eBooks simply fails to disclose, suggest or teach “a root directory” and “a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information relating to the converted document” as recited in claim 32. (Emphasis added). The Open eBook document describes a structure for representing the content of electronic books. However, nowhere in Open eBook does it teach or suggest that a converted document comprises a root directory and a content subdirectory, the content subdirectory having nested therein at least one linked content file providing content information relating to the converted document, as claimed. Open eBook merely discusses

nesting tags and elements within a single file or tag structure. Therefore, for at least this reason, the combination of Murashita and Open eBooks fails to support an obviousness-type rejection for independent claim 32.

Claims 33-35 depend from independent claim 32 and are allowable for at least the reason discussed above with regards to independent claim 32.

B. Claims 10 and 11 are Patentable under 35 U.S.C. 103(a) over Open eBooks in view of Kucera because Open eBook fails to disclose “if the left and right terms are not part of a single word, inserting a word break flag between the left and right term” as recited in claim 10.

Claim 10 recites:

A method for pre-computing an electronic document having markup language content comprising the steps of:

- (a) identifying a tag between a left and a right term within a document;
- (b) determining whether the tag is within a single word; and
- (c) if the left and right terms are not part of a single word, inserting a word break flag between the left and right term,

whereby a word break may be readily identified during a run-time search operation.

The Examiner argued that it would have been obvious to one of ordinary skill in the art to have used the metadata ability of Open eBook to have placed a word break flag to separate two distinct words, citing Open eBooks Section 2.2, lines 7-12. Lines 7-12 of Open eBook Section 2.2 are provided below:

The *x-metadata* element must contain one or more instances of a *meta* element, analogous to the HTML 4.0 *meta* element, but applicable to the publication as a whole. The *x-metadata* element allows content providers to express arbitrary metadata beyond the data described by the Dublin Core language. Individual OEB documents may include the *meta* element directly (as in HTML 4.0) for document-specific metadata. This specification uses the OEB package file alone as the basis for expressing publication-level Dublin Core metadata.

Appellants submit that the cited section of Open eBooks does not disclose, teach or suggest the claimed features of independent claim 10. Lines 7-12 of Section 2.2 of Open eBook are simply inapplicable to inserting a word break flag between a left and right term. A generalized ability to insert metadata elements into an Open eBook tag is not suggestive of the claimed feature of “if the left and right terms are not part of a single word, inserting a word break flag between the left and right term” as recited in claim 10.

In addition, the Examiner argued that metadata can enhance a search of a document by providing relevant search information about the content of the document. Appellants submit this also does not disclose, teach, or suggest the claimed element of “inserting a word break flag between the left and right term.” Accordingly, as Open eBook fails to disclose the claimed feature, the combination of Open eBooks and Kucera fails to support an obviousness-type rejection for independent claim 10.

Dependent claim 11 is allowable for at least the above reasons and for the additional features recited therein.

C. Claims 14 and 15 are patentable under 35 U.S.C. §103(a) over Open eBooks in view of Edelman because Edelman fails to disclose “replacing part of the URL with the reference string and a flag for the file” as recited in claim 14.

Claim 14 recites in relevant part:

A method for pre-computing an electronic document having markup language content comprising the steps of:

- (a) identifying a Uniform Resource Locator (URL) within a document;
- (b) searching a manifest file for a file referenced by the URL; and
- (c) if the file is identified in the manifest file with a reference string, replacing part of the URL with the reference string and a flag for the file,

whereby the file referenced by the URL may be readily accessed when selected during run-time.

Appellants respectfully submit that the combination of Open eBook and Edelman do not disclose, teach, or suggest the claimed feature of “replacing *part* of the URL with the reference string and a flag for the file.” (Emphasis added). Appellants respectfully submit that Edelman does not teach replacing part of a URL with a reference string and a flag as recited in claim 14. Rather, Edelman shows replacing an entire element with another element. For example, at column 2, lines 37-38, Edelman states: “The apparatus can also replace the found element with a substitute element.” Nowhere in Edelman is found any discussion of “replacing part of the URL” as recited in claim 14. Though Edelman may enable an element to be part of another element, it does not disclose the claimed feature of “replacing *part* of the URL with the reference string and a flag for the file.” Therefore, for at least this reason, Appellants respectfully submit that independent claim 14 is in condition for allowance.

Dependent claim 15, which ultimately depends from claim 14, is allowable for at least the same reason as independent claim 14.

9. Conclusion

The rejections contained in the Final Office Action of October 19, 2004 should be reversed for at least the reasons recited above. Reversal of the rejections is requested.

Respectfully submitted,

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APPENDIX

CLAIMS INVOLVED IN THE APPEAL

1. A method for encoding an electronic document having markup language content, wherein the document includes at least one tag and an associated content, the method comprising the steps of:

- (a) separating the tag from the content with a separation variable;
- (b) replacing the tag with an alias, wherein the alias is a pre-defined representation for the tag; and
- (c) inserting at least one flag within the tag to form an encode tag structure, wherein a first encoded document is formed.

2. The method for encoding of claim 1, wherein the step of replacing includes the step of replacing at least one attribute type within the tag with an attribute alias, wherein the attribute alias is a predefined representation for the attribute type.

3. The method for encoding of claim 1, further comprising the steps of:

- (d) UTF-8 encoding the first encoded document to form a second encoded document.

4. The method for encoding of claim 3, further comprising the step of:

- (e) compressing the second encoded document to form a compressed document.

5. The method for encoding of claim 1, wherein the step of inserting includes the step of inserting a position flag to indicate whether the tag is a start tag or an end tag.

6. The method for encoding of claim 1, wherein the step of inserting includes the step of inserting a word break flag between a left and right term of the associated content, whereby a word break may be readily identified during a run-time search operation.

7. The method for encoding of claim 1, wherein the step of inserting includes the step of inserting a no search flag in association with a portion of the content information, whereby a no search field may be readily identified and skipped during a run-time linear search.

8. The method for encoding of claim 1, further comprising the step of:
(d) replacing a URL within the content information with a reference string,
whereby the file referenced by the URL may be readily accessed when selected during
run-time.

9. A computer-readable medium having computer-executable instructions for
performing the steps recited in claim 1.

10. A method for pre-computing an electronic document having markup language
content comprising the steps of:

- (a) identifying a tag between a left and a right term within a document;
- (b) determining whether the tag is within a single word; and
- (c) if the left and right terms are not part of a single word, inserting a word
break flag between the left and right term,
whereby a word break may be readily identified during a run-time search operation.

11. A computer-readable medium having computer-executable instructions for
performing the steps recited in claim 10.

12. A method for pre-computing an electronic document having markup language
content comprising the steps of:

- (a) identifying a tag within a document associated with a portion of content;
- (b) determining whether the portion is to be displayed for viewing by a
reading device; and
- (c) if the portion is not to be displayed for viewing, inserting a no search flag
in association with the portion,
whereby a no search field may be readily identified and skipped during a run-time linear
search.

13. A computer-readable medium having computer-executable instructions for
performing the steps recited in claim 12.

14. A method for pre-computing an electronic document having markup language
content comprising the steps of:

- (a) identifying a Uniform Resource Locator (URL) within a document;

(b) searching a manifest file for a file referenced by the URL; and
(c) if the file is identified in the manifest file with a reference string, replacing part of the URL with the reference string and a flag for the file,
whereby the file referenced by the URL may be readily accessed when selected during run-time.

15. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 14.

16. A method for encoding an electronic document comprising the steps of:

- (a) inserting at least one code character into the electronic document to separate markup language from content;
- (b) locating a tag within the electronic document associated with a portion of content;
- (c) identifying a pre-defined integer alias for the tag; and
- (d) replacing the tag with the alias,

whereby the tag may be readily identified during run-time parsing of the document.

17. The method of encoding of claim 16, further comprising the steps:

- (e) locating an attribute type within the tag;
- (f) identifying a pre-defined attribute alias for the attribute type; and
- (g) replacing the attribute type with the attribute alias.

18. A computer readable medium having computer-executable instructions for performing the steps recited in claim 16.

19. A computer-readable medium having stored thereon a markup language document comprising in combination:

- (a) at least one tag having encoded therein a predefined integer alias for the tag;
- (b) an content portion associated with the tag;
- (c) a code separating the tag from the content portion,

whereby the content and markup within the document may be readily parsed at run-time.

20. The computer-readable medium of claim 19, wherein the tag further includes at least one flag wherein the flag is selected from the group consisting of WORDBREAK, NOSEARCH, STARTTAG, and ENDTAG.

21. The computer-readable medium of claim 19, wherein the tag further includes at least one pre-defined attribute type alias.

22. The computer-readable medium of claim 19, wherein the markup language document is UTF-8 encoded.

23. The computer-readable medium of claim 22, wherein the markup language document is compressed.

24. A computer-readable medium having stored thereon an electronic book having a file format hierarchy comprising in combination:

(a) a root directory;

(b) a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information relating to the electronic book, wherein the content file is pre-computed and encoded to minimize computational run-time requirements.

25. The electronic book of claim 24, further comprising:

(c) at least one link destination index file linked to the content file.

26. The electronic book of claim 24, further comprising:

(c) page break index providing an index of page break corresponding to the electronic book.

27. The electronic book of claim 24, further comprising:

(c) metadata file linked to the root directory and having information about the electronic book.

28. The electronic book of claim 24, further comprising:

(c) manifest file linked to the root directory providing a listing of the files in the content subdirectory relating to the electronic book.

29. The electronic book of claim 24, wherein the content database further includes at least one Cascading Style Sheets (CSS) file.

30. The electronic book of claim 24, further comprising:

(c) metadata file linked to the root directory and having information about the electronic book; and

31. The electronic book of claim 24, further comprising:

(c) a digital rights management database linked to the root database.

32. A method of converting an electronic document comprising markup language therein, the method comprising the steps of:

(a) receiving the document having a first format;

(b) processing the document to encode and pre-compute the markup language within the document; and

(c) forming a converted document, wherein the converted document has a file format hierarchy comprising in combination:

(i) a root directory; and

(ii) a content subdirectory linked to the root directory, the content subdirectory having nested therein at least one linked content file providing content information relating to the converted document.

33. The method of converting of claim 32, wherein the first format is an Open E-Book format.

34. The method of claim 32, wherein the document is an electronic book.

35. A computer-readable medium having computer-executable instructions for performing the steps recited in claim 32.